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ABSTRACT

This article reports a study investigating deviant behavior in normal families. It examines nonproblem children and their families in their homes. It provides information on rates of deviant behavior for children without identified behavioral difficulties and the interaction patterns of family members who deal with these children. It analyzes: (1) rate of deviant child behavior, (2) agents who affect it, and (3) relationship between rate of deviant child behavior and patterns of family interaction. Thirty-three families with a child 4 to 6 years old without treated behavior problems participated. Both parents, not under current psychiatric care, were living in the home, which included no more than four children. Results indicate that over 96% of the average child's behavior is nondeviant and 35% of it represents positive social interaction. Even the most deviant child displayed 88% appropriate behavior. The average child, however, puts out responses which parents consider deviant once every 3.17 minutes. The probability is that the child will not obey one out of every four commands the parents give. The conclusion is that deviant behavior is more successful in coercing people to respond. (DJ)

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HOW DEVIANT IS THE NORMAL CHILD?

A BEHAVIORAL ANALYSIS OF THE PRESCHOOL CHILD AND HIS FAMILY

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HOW DEVIANT IS THE NORMAL CHILD?

A BEHAVIORAL ANALYSIS OF THE PRESCHOOL CHILD AND HIS FAMILY[1]

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> Every beginning textbook tells the student that failure and frustration are important behavior phenomena, and that rewards and punishments are important attributes of man's environment. But where is the information on the forms, abundance, and the distribution of these important phenomena outside the very limited, specially contrived situation of psychological laboratories and clinics? As a psychologist, what answer should I give a layman seeking information from me, as a scientific expert, on the occurrence among men of frustration, for example? To what handbook of data should I refer him? (Barker, 1964, p. 2).

It was recently reported that, through the use of behavior modification procedures, the amount of attention to task behavior of second, third, and fourth grade problem children could be raised from a preintervention average of 39% to a followup average of 66% (Walker, Mattson, & Buckley, 1971). Were these cases successes or failures? Is an attention to task ratio of 66% adequate for a typical child in these grades, or is this still far below what is needed to survive in this environment? Fortunately these questions can be answered in the Walker et al. study because it is one of the few research reports in the behavior modification literature which provides some normative data on the peers of these "problem" children. As it turned out, the average attention to task ratio of the problem children's classmates was 76% with a standard deviation of 7.8%.

Three of six cases reported were obvious successes since the children involved showed mean attention to task ratios of 73%-85% at followup. Two others were modest successes showing attention to task ratios of 61%-64%. One case was an obvious failure with a followup attention to task ratio of

32%. The meaningfulness and utility of the Walker et al. study was greatly enhanced by the provision of normative data. A great deal of behavior modification research suffers, however, from the failure to attend to the normative question.

Traditionally, behaviorists working with children have used behavioral observation data to establish the rates of problematic behavior and to derive hypotheses about the social contingencies and antecedents which serve to maintain problem behavior or to suppress the rate of desirable behavior. With only a few exceptions, however, (e.g., Patterson, Cobb, & Ray, 1972a,b; Walker & Buckley, 1972; Werry & Quay, 1968), there has been no normative data on these variables which are believed to be so important. With the exception of some recent work by G. R. Patterson and J. Cobb (in preparation), the authors are aware of no normative information on children's behavior in their own homes.

Behavior therapists have repeatedly observed that contingency management is poor in families with problem children and that these children display rates of deviant behavior which are high enough to be lowered (e.g., Hawkins, Peterson, Schweid, & Bijou, 1966; Johnson & Brown, 1969; Patterson & Reid, 1970; Wahler, 1968; Wahler, Winkel, Peterson, & Morrison, 1965). Yet, comparisons with families and children who are not having trouble have been lacking, and source materials on these dimensions which behaviorists deem important have been unavailable.

The present study was designed to examine a relatively substantial sample of nonproblem children and their families through naturalistic observation in their own homes. While the sample is not ideal for normative purposes either in terms of size or selection, the data provided have proven

of considerable utility in clinical work with children and families. The data provide information on the rates of deviant behavior for children who are not viewed as having behavioral difficulties, as well as data on the interaction patterns of family members who deal with these children. Thus, it is possible to examine the rate of deviant child behavior, the agents who provide the antecedents and consequences for it and the types of antecedents and consequences which they provide. Finally, it is possible to examine the relationship between the rate of deviant child behavior and the patterns of family interaction. Presentation of this descriptive data and behavioral analysis is the object of the present report.

Method

Subjects:

Thirty-three subject families were recruited from the community in Eugene, Oregon, by radio, television and newspaper advertising and were paid $20 for their participation. Families were required to have: a) a target child between the ages of 4.0 and 6.0 with no history of treatment for behavior problems; b) both parents living in the home; c) no more than four children in the home; d) no family member under current psychiatric care.

Demographic data was obtained on these families so that an overall description of the sample is possible as are breakdowns by demographic variables. The median income level for these families was in the $6,000-$9,000 range (range: $0-3,000; over $12,000); the mean occupational level as measured by the Hollingshead Index where the lowest level is 7 and the highest level is 1 was 2.9 (range 1-7); the median I.Q. score as measured by the Shipley-Hartford Vocabulary Scale for all parents was 106 (range: 83-120).

The median age of parents was 31 (range 22-45), and these families had a median of three children (range 1-6).

Procedures:

Each family was observed for five consecutive week days for forty-five minutes on each occasion. Observations were conducted during the hour prior to the family's dinner when all family members were normally present. Families were required to comply with the following rules: a) all family members were required to be present; b) all family members were required to remain in a specified two-room area; c) no interactions with the observer were permitted; d) the television set was not allowed on; e) no visitors were permitted and telephone calls were to be quickly terminated. Parents were instructed to try to behave as they would if no observers were present and to present as representative a picture of the family as possible.

Observation system:

A revision of the observational coding system developed by Patterson, Ray, Shaw and Cobb (1969) was employed. This system utilizes 35 distinct behavior categories to record all the behavior of the target child and all behaviors of other family members who interact with him. The system is designed for rapid sequential recording of the child's behavior, the responses of family members, the child's ensuing response, etc. For purposes of determining observer agreement, all interactions were coded in the framework of 30-second intervals, and observers were equipped with a 30-second stopwatch and signaling apparatus. Each 30 second interval was broken down into interaction blocks in which were recorded the child's behaviors and family members' response to those behaviors. Each block could contain one or two

child behaviors, and one or two responses from each coded family agent. No more than two individual family agents could be coded as responding in each block. Provision was made, however, for the circumstance in which all family members present responded in the same manner.

Child behaviors which were continuous and without changes in family response were recoded every ten seconds. Otherwise, behavior interchanges were coded as they occurred. Behavior which most often caused the 10-second rule to be invoked included continuous independent activity by the child followed by continuous nonresponding by family members and continuous, rapid "nonverbal interaction" or talking where the coding of each interachange would be impossible. In general, between three and four interaction blocks were recorded during each 30-second period, but no minimum or maximum number was required.[2]

For purposes of the present investigation, each of the behavior codes was categorized as being either a deviant or nondeviant child behavior. This categorization was based on the results of a questionnaire given to all of the parents in the sample. The questionnaire provided a simple definition of each behavior category and requested that parents categorize these behaviors on a deviant-nondeviant dimension. Parental ratings were done on a three-point scale with a rating of 1 designating a clearly deviant response and a rating of 3 designating a clearly nondeviant and pleasing behavior. Any behavior with an overall average score of 1.75 or less was classified as deviant. All but three of the other response codes were classified as nondeviant. Although parents viewed dependency and cry as fairly nondeviant, the authors were reluctant to classify them in this manner for purposes of studying consequence patterns. Similarly, since self-stimulation could be of a pathological nature or a purely incidental behavior, parents had difficulty in classifying

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it as a deviant and nondeviant behavior. As a result, these three response codes were not included in either category. Those behaviors which involved social interaction and which obtained an average parental rating score of 2.25 or greater were characterized as "prosocial" and these scores were summed to yield a prosocial interaction score.

Behavior codes were also categorized as serving either a positive, negative, or neutral antecedent and consequent function. Due to the lack of empirical data in this area, these categorizations reflect the investigators' assumptions about the intended functions of these behaviors when directed toward the typical 4 to 6 year old child. All of the 35 behavior codes together with their designations are presented in Table 1.

Insert Table 1 About Here

Observers:

All observations were made by one of a corps of student coders who were trained extensively and continuously throughout the period of data collection.[3] Observer reliability was checked in 13 of the 33 families for at least one full observation period.

For an initial and highly stringent test of observer agreement, an overall percent agreement figure was computed. An agreement between observers was scored whenever both coded the same behavior for the same agent in the same interaction block. The number of agreements was then divided by the number of agreements plus disagreements, yielding an average observer agreement figure of 65.29%.

While this figure may seem low by some standards, it is not unrepresentative of agreement figures for complex coding systems when the criteria

are as stringent as those employed here. Since data are lumped by deviant-nondeviant responding and positive, negative or neutral behavior, this figure undoubtedly represents an overly conservative estimate of agreement for the present purposes. Additionally, it should be noted that the level of agreement which could be expected by chance with this system is less than 5%.

If the statistics of particular interest in this study are taken from the calibrating day of observation and are correlated across the two observers, more relevant indexes of overall agreement may be obtained. For example, the total number of deviant behavior which the regular observer saw on the calibrating day correlated .78 with total number that the calibrating observer recorded. Since this correlation is based on only one day of observation and the deviant behavior statistic is based on five days of observation, the Spearman-Brown formula may be used to yield the agreement correlation which would be derived from an observation period five times as long. For this statistic, the expected correlation becomes .94. The same strategy was applied to each individaul behavior code resulting in a median correlation of .88 for the 19 codes which occurred for 5 or more children. This correlation is raised to .97 by the Spearman-Brown correction. The corrected agreement correlation for the deviant percent of total was .93. The corrected agreement correlations for the overall proportion of positive, negative, and neutral consequences which a child received from his entire family were .96 for positive, .98 for negative, and .96 for neutral. The agreement figures for these proportion scores in relation to deviant behaviors only, and with regard to various agent classes, cannot be fairly calculated because of the low number of occurrences of deviant behavior in any one day.

Reliability:

It is also of interest to know the reliability, as distinct from the

observer agreement, on the statistics used here. For this purpose, the observational data on all 33 cases was split in half with the data from the first, third, and beginning half of the fifth day comprising one-half and the remaining data making up the other half. The correlation of the scores from each half provide odd-even, split-half reliability measures which may similarly be corrected for attenuation by the Spearman-Brown formula. The corrected split-half reliability of the total deviant behavior score was .84 and the corrected reliability of the deviant percent of the total was .78. The median corrected reliability figure for those 28 individual behaviors observed for 10 or more subjects was .70 and the overall consequence proportion scores show a split-half reliability of .87 for positive consequences, .90 for negative, and .88 for neutral consequences.

Results

Summary statistics based on the home observation data are presented in Table 2. This data indicates that the mean rate of deviant behavior in this

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Insert Tables 2 and 3 About Here

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sample was .314 per minute, accounting for 3.6% of total coded behavior. Mean prosocial interaction behavior accounted for 34.64% of the total coded behavior. The mean compliance ratio (i.e., $\frac{\text{compliance}}{\text{compliance plus noncompliance}}$) was 74% to parents with little variance associated with which parent gave the command. The average compliance ratio to siblings of 53% was, however, significantly lower than that given to parents ($t = 2.83$, $df = 45$, $p < .01$). Analyses of all these summary statistics appropriate to the children revealed no significant differences associated with the child age or sex.

Descriptive data on the average rates of occurrence of all of the coded behaviors and the pattern of social consequences associated with them are presented in Table 3. This table also presents the average percent of the total accounted for by that behavior, and the number of children in the sample who emitted the behavior. The individual behaviors in Table 3 are listed in an order determined by their consequent pattern with the behavior receiving the highest proportion of negative consequences listed first and the behavior receiving the lowest proportion of negative consequences last. As is clear from examination of this data, those behaviors labeled deviant are very consistently found toward the top of the list. In addition, behaviors which were regarded as negative consequences are also those which consistently received higher proportions of negative responding. Only two behaviors (dependency and command) which were neither deviant nor negative received a relatively high proportion of negative consequences. The results for dependency behavior are not very meaningful because they are based on only one subject. The results for command are probably attributable to the fact that noncompliance to commands was coded as a negative consequence.

A summary of the social consequence data for deviant and nondeviant behavior is presented in Table 4. The average proportion of positive,

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Insert Table 4 About Here

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negative, and neutral consequences which families provide each behavior class is summarized. Separate analyses of variance for the three consequence categories indicated that deviant behavior received significantly more negative and neutral consequences (negative: $\underline{F} = 8.12$, $\underline{df} = 1,61$, $\underline{p} < .01$; neutral: $\underline{F} = 155.43$, $\underline{df} = 1,61$, $\underline{p} < .001$) and significantly fewer positive consequences

(F = 699.81, df = 1,61, p < .001) than did nondeviant behavior.[4]

In a separate report of this research effort (Wahl, Johnson, Johansson and Martin, 1972) these results were further broken down by family agents. The reader is referred to that paper for an extended report, but the general findings of this analysis showed that mothers and fathers did not differ significantly in their consequence patterns or in their degree of involvement with their children's deviant and nondeviant behavior. Siblings did differ from parents, however, in that they tended to be less positive to these children irrespective of their prior behavior. Furthermore, siblings tended to discriminate better between deviant and nondeviant behavior in giving positive consequences but this interaction was not statistically significant.

Having catalogued the nature and frequency of child deviant behavior and the contingency patterns in these families, the investigators were interested in the relationships between the rate of deviant child behaviors and family consequence patterns. These relationships were examined through the correlation of the percent of the child's behavior which was deviant with the proportions of positive, negative, and neutral consequences provided by agents to the child's behavior. Separate correlations were computed using the positive, negative, and neutral proportions for deviant behaviors only, nondeviant behaviors only, and all behaviors.[5] These correlations for mothers, fathers, parents combined and siblings combined are presented in Table 5. The correlations in Table 5A illustrate that there is a moderate and generally significant positive relationship between the amount of deviant behavior which a child demonstrates and the proportion of <u>total</u> positive consequences which he

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Insert Table 5 About Here

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receives. The correlations in Table 5B illustrate that there is a consistently high and significant positive relationship between the proportion of negative consequences a child receives irrespective of his behavior and his total deviance. Table 5C illustrates that there is a consistently negative relationship across agents between the total proportion of neutral consequences and deviant behavior. The reader should keep in mind that the correlations across any given positive, negative, and neutral breakdown are not independent. Thus, positive relationships in Table 5A and 5B insure negative relationships in 5C. This lack of independence does not invalidate the methodology, but only means that any correlation must be interpreted as part of a pattern rather than as independent. The correlations in the remainder of Table 5 are those resulting from a breakdown of consequence categories such that the consequence proportions to deviant and nondeviant behavior are examined separately. Somewhat surprisingly, the direction of the relationships are not affected by this breakdown.

The correlations relating deviancy levels to consequence proportions are generally higher for the nondeviant than the deviant breakdown. This is probably the result of the fact that responses to nondeviant behavior represents a much larger sample of the agents' behavior and thus gives a more reliable estimate of the agent's true score. In general, the results are the same throughout: more deviant children tend to receive more positive and negative attention and less neutral responding irrespective of their immediately preceding behaviors. This relationship is most consistent and powerful for negative responding. The best behavioral predictor of child deviancy in this sample is the overall negativeness of the parents (r = .777, df = 31, p < .01).

These results suggested that, while family agents may show some discrimination in responding to deviant and nondeviant behavior, they are also probably affected by more generalized tendencies to respond in a positive, negative, or neutral manner. To test this hypothesis, the proportion of positive consequences which an agent provided for nondeviant behavior was correlated with the proportion which he provided for deviant behavior. The same was done for the proportions of negative and neutral consequences. The results of this analysis, presented separately for the various agent classes,

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Insert Table 6 About Here
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are given in Table 6. It is clear that these correlations support this hypothesis. It is interesting to note that parental negative responding is the most consistent across behavior classes ($r = .596$, $df = 31$, $p < .01$).

Discussion

How deviant is the "normal" child? The answer to this question depends largely on the perspective one takes in viewing the present findings. On the one hand, over 96% of the average child's behavior is nondeviant and 35% of it represents clearly positive social interaction. Even the most deviant child in the sample displayed 88% appropriate behavior. On the other hand, the average child in this sample puts out responses which parents consider deviant at the rate of one every 3.17 minutes. Furthermore, the probability is one in four that the child will not obey any command which his parents give him. The level of difficulty of this pattern could certainly be considered substantial and most child behavior modifiers would probably feel that these

levels could be substantially altered by the appropriate application of contingencies.

It would be useful at this point to compare this sample of children with a group of similar age who had been referred for treatment. While data of this kind are being collected presently, the sample is not yet of sufficient size to make comparisons very meaningful. Some recent data reported by Shaw (1971), however, give some indications of what comparison studies may reveal. This study reported the comparison of home observation data collected on 15 children referred to an outpatient treatment program (see Patterson, Cobb and Ray, 1972b) with 15 "normal" children matched for age whose families were recruited for research. These children were all boys ranging in age from 6 to 12 years of age. While the mean rate of deviant behaviors for the referred children of .783 per minute was more than double that observed for the recruited children (.384), these differences were not significant and there was substantial overlap in the two distributions.[6] Although the size of these samples is small and the age range variable, the results strongly suggest that referral for treatment is based on many factors other than the observed rates of deviant behavior in the home. In this connection, it is noteworthy that Shaw's (1971) findings are not unique in literature on this question (e.g., Buckle & Lebovici, 1960; Lapouse & Monk, 1958; Rutter & Gramham, 1965; Sheppard, Oppenheim & Mitchell, 1966).

When larger samples of such comparison data are available, it may prove instructive to look for differences in the rates of specific behaviors, the special characteristic of families who seek help, the variance in parental expectations for appropriate child behavior, etc. From experiences in working with "problem" children, the investigators suspect that a good portion of the

variance may be due to a given child's behavior in school and the associated willingness of school personnel to refer parents for treatment.

How deviant is the "normal" family? Here, the answer is somewhat less equivocal. While families do discriminate in their responses between deviant and nondeviant child behavior to a statistically significant degree, this discrimination is not what it might be. Children receive more positive consequences for deviant behavior than either negative or neutral responses and the analysis reported in Wahl et al. (1972) indicates that parents are particularly prone to respond positively to deviant behavior. Furthermore, all family agents seem to be heavily influenced by a generalized response tendency to a given child. That is, if an agent is prone to respond positively to nondeviant behavior, he is more likely to respond positively to deviant behavior. A tendency toward negative responding may be shown irrespective of prior child behavior.

Are the normative data on contingencies reported here optimal from a behaviorist's perspective? Would a behaviorist who works with children and families feel he had nothing to offer our "average" family in terms of better child management?

Correlational analyses across all families reveal several other important relationships between the amount of child deviance and the social consequence patterns of families. As a child shows higher rates of deviant responding, it is much more likely that he will be responded to in a negative manner regardless of his preceding behavior. In addition, when the highly deviant children are deviant, they tend to receive a somewhat higher proportion of positive consequences as well as a consistently higher proportion of negative consequences (see Table 5D, E). Since a large proportion of the neutral category is accounted for by the code "no response," this means that deviant

children tend to get more attention or active responding for deviance than do low deviant children. The correlational data also indicate, however, that this same pattern is replicated for the deviant child when he is being non-deviant. Thus, more deviant children get more active responding (i.e., clearly positive and negative consequences) than do less deviant children. This "squeaky wheel gets the oil" phenomenon has also been reported in research on contingencies in the classroom where it has been found that more disruptive chidren get a greater number of both positive (Anderson, 1964) and negative (Ebner, 1967) consequences for their behavior. Walker and Buckley (1971) have reported that, in their observation of two disruptive and two nondisruptive children, the deviant children received 77% of the total teacher attention given.

These results tend to support notions about reciprocity in social interaction (e.g., Gergen, 1969; Homans,1961; Thibaut & Kelley, 1959), as well as the description of coercive interaction patterns forwarded by Patterson and Cobb (1972). On the one hand, the deviant child's world could be described as one reflecting reciprocity because, while he gives out more "pain" in the form of deviant behavior, he receives more "pain" in the form of negative consequences. Indeed, the best behavioral predictor of child deviance in this sample was parental overall negativism (see Table 5B). On the other hand, however, the highly deviant child is also somewhat more successful in getting positive attention for his behavior. Certainly, he gets more active attention from people in his environment. In Patterson and Cobb's (1972) terms, he could be said to be more successful in <u>coercing</u> people to respond to him. While the coercion may have a price, it produces a definite payoff in terms of increased attention. And, as has been documented elsewhere (e.g., Lovass, Freitag, Kinder, Rubenstein, Schaeffer, & Simmons, 1964; Madsen, Becker,

Thomas, Kaser, & Plager, 1968; Thomas, Becker, & Armstrong, 19[illegible]), even negatively valanced attention may serve as a reinforcer for many children. While adults may wish that negative attention (i.e., disapproval, humiliation, threats, yelling, etc.) will be punishing, it may, for some children, serve a reinforcing function.

One of the investigators' most gnawing concerns about this research endeavor has been that subject recruitment can never be strictly random for home observation studies, and as a result, one cannot be sure about the true "normative" nature of these findings. A partial solution to this problem has been found in the research now underway for a sample of families with children between 6.0 and 8.0 years of age. For the latter project , a list of all first and second graders in the local school district was obtained. Families have been randomly selected from this list for recruitment. Although the acceptance rate is only in the 50% range, these procedures better approximate random selection. Furthermore, at least some of the demographic characteristics of the volunteer and refusal families can be examined, and it will be possible to examine differences between families recruited in this manner and families with children of the same age recurited through advertisements.

For the moment, the present sample must be described as one in which the target children have no history of treatment for behavior problems and in which the parents do not view them as being in need of help for such difficulties. Furthermore, the families were ones in which no current psychological problems were being treated and, in this sense, they viewed themselves and their children as "normal." Thus, while the present research is, in several ways, imperfect, it represents one of the few attempts to catalogue the "forms, abundance and the distribution of these important phenomena...."

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Footnotes

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[2]The observation coding manual may be obtained from the authors on request.

[3]The authors would like to express their appreciation to the dedicated corps of observers: Barbara Burgess, Michael Churchich, Bonnie Hammel, Marci Hanson, Linda Keller, William McCluskey, Linda Musun, Paula Nesbitt, Dee Ann Starkey, and Marie Rering.

[4]These analyses were done after arc-sin transformations had been performed on this proportion data. The *F* values are from a two-way analysis in which the effects of agent groups were also examined.

[5]The percent of deviant behaviors was employed rather than the simple number of deviant behaviors to adjust for slight differences in children's activity level. Results based on the use of the raw deviant behavior scores are virtually identical to those based on the proportion scores.

[6]The reader should be aware of the fact that the Patterson *et al.* (1969) code and the one used here are not directly comparable. Patterson *et al.* (1969) tend to code more behaviors per 30-second block and there are slight differences in the codes used.

Table 1

Observation Code Items Listed by Child Behavior Categories and Consequence Categories

Child Behavior Category			Consequence Category		
Deviant	Nondeviant	Prosocial	Positive	Negative	Neutral
Demand Attention	Command	Approval	Approve	Threatening Command	Command
Violation of Standing Command	Command Negative (Terminating)	Attention	Attention	Command Negative (Terminating)	Command Prime*
Destructiveness	Command Prime*	Compliance	Comply	Cry	Dependency
High Rate	Disapprove	Laugh	Indulgence	Violation of Standing Command	Independent Activity
Humiliate	Independent Activity	Nonverbal Interaction	Laugh	Disapprove	Leave
Noncompliance	Indulge	Physical Positive	Nonverbal Interaction	Destructiveness	No Response
Physical Negative	Leave	Touch	Physical Positive	Humiliate	Self-Stimulate
Smart Talk	No Response		Receive	Ignore	High Rate
Tease	Receive		Talk	Noncompliance	
Tantrum	Talk		Touch	Negativism	
Whine				Physical Negative	
Yell				Smart Talk	
Threatening Command				Tease	
Ignore				Tantrum	
Negativism				Whine	
				Yell	
				Demand Attention	

*A command for which compliance would be impossible to determine. Refers to commands for future action, or very general commands.

Table 2

Summary Statistics for Home Observation Data

Total Child Behaviors 1866*

Child Compliance Ratio:

Mother	.721 (.164)
Father	.744 (.140)
Parents	.739 (.122)
Siblings	.526 (.350)

Child Deviant Behavior:

Total	70.76 (57.44)
Rate per minute	.314 (.255)
Percent of total	3.60 (2.65)

Child Prosocial Interaction:

Total	646.31
Rate per minute	2.87
Percent of total	34.64

*Numbers in parentheses indicate standard deviation for the corresponding statistics.

Table 3

Mean Rate of Occurrence and Pattern of Social Consequences

For Each Behavior Category Over Five Observation Periods†

Behavior	Number of Occurrences	Percent of Total	Percent Positive Conse-Quences	Percent Negative Conse-Quences	Percent Neutral Conse-Quences	Number of Children Emitting Behavior
Dependency	.03	.0	.0	100.0	.0	1
Command Negative[1]	2.84	.1	38.2	57.8	3.9	16
Physical Negative*[1]	3.75	.2	34.5	53.0	12.3	21
Threatening Command*[1]	.25	.0	28.5	42.8	28.5	4
Negativism*[1]	1.37	.1	43.1	39.2	17.6	13
Smart Talk*[1]	1.81	.1	51.5	39.0	9.3	13
Tease*[1]	2.47	.1	41.7	38.2	20.0	13
Command	27.09	1.4	61.1	35.8	2.9	32
Destructiveness*[1]	.31	.0	17.6	35.2	47.0	6
Violation of Standing Command*[1]	.19	.0	16.6	33.3	50.0	4
Disapproval[1]	4.78	.2	56.3	23.9	19.6	21

*Deviant Behavior

[1]Negative Consequence

†Note.--Humiliate was never coded for any of these children.

Table 3 - Continued

Mean Rate of Occurrence and Pattern of Social Consequences

For Each Behavior Category Over Five Observation Periods

Behavior	Number of Occurrences	Percent of Total	Percent Positive Conse-Quences	Percent Negative Conse-Quences	Percent Neutral Conse-Quences	Number of Children Emitting Behavior
Yell*[1]	9.22	.4	55.8	21.8	22.3	24
Ignore*[1]	1.44	.1	61.7	20.5	17.6	15
Noncompliance*[1]	23.37	1.2	35.3	17.6	47.0	32
Whine*[1]	12.53	.6	60.3	12.5	27.0	27
Cry[1]	11.31	.6	54.8	9.7	35.3	23
No Response	6.84	.3	41.7	9.5	48.6	22
Demand Attention*[1]	3.97	.2	51.1	8.5	40.3	20
High Rate Behavior*	14.50	.7	21.6	6.5	71.7	25
Compliance	56.84	3.0	65.5	5.4	28.9	32
Receive	5.50	.2	89.3	5.3	5.3	27
Laugh	38.00	2.0	77.8	4.4	17.6	31
Touch	49.34	2.6	88.8	4.3	6.8	27

*Deviant Behavior

[1]Negative Consequence

Table 3 - Continued

Mean Rate of Occurrence and Pattern of Social Consequences

For Each Behavior Category Over Five Observation Periods

Behavior	Number of Occurrences	Percent of Total	Percent Positive Conse-Quences	Percent Negative Conse-Quences	Percent Neutral Conse-Quences	Number of Children Emitting Behavior
Physical Positive	11.19	.5	93.8	3.4	2.6	26
Indulge	.66	.0	47.2	2.7	50.0	11
Leave	6.81	.3	11.2	2.5	86.2	25
Talk	474.03	25.2	87.6	2.0	10.2	32
Attend	94.37	5.0	43.1	1.3	55.5	32
Nonverbal Interaction	395.78	21.1	96.5	1.2	2.1	32
Self-Stimulation	114.72	6.1	37.9	1.1	60.9	31
Independent Activity	497.34	26.5	7.3	.5	92.1	32
Approve	.72	.0	100.0	.0	.0	10
Command Prime	.28	.0	90.0	.0	10.0	6
Tantrum*[1]	.06	.0	100.0	.0	.0	1

*Deviant Behavior

[1]Negative Consequence

Table 4

Percent of Positive, Negative and Neutral Consequences Provided by the Entire Family to Deviant and Nondeviant Child Behaviors

	Positive	Negative	Neutral
Deviant	39.9	14.3	45.7
Nondeviant	58.8	2.0	39.1

Table 5

Correlations of Deviant Behavior Percent with

Positive, Negative and Neutral Consequence Proportion Scores

A. Positive Overall Consequences

mother	.410*
father	.168
parents	.359*
siblings	.558**

B. Negative Overall Consequences

mother	.618**
father	.775**
parents	.777**
siblings	.532**

C. Neutral Overall Consequences

mother	-.467**
father	-.298
parents	-.426*
siblings	-.591**

D. Positive Consequences to Nondeviant Behavior

mother	.460**
father	.235
parents	.419*
siblings	.619**

E. Positive Consequences to Deviant Behavior

mother	.106
father	.011
parents	.007
siblings	.285

F. Negative Consequences to Nondeviant Behavior

mother	.618**
father	.738**
parents	.718**
siblings	.476**

* $p < .05$
** $p < .01$

Table 5 - Continued

Correlations of Deviant Behavior Percent with

Positive, Negative and Neutral Consequence Proportion Scores

G. Negative Consequences to Deviant Behavior

mother	.235
father	.259
parents	.439*
siblings	.005

H. Neutral Consequences to Nondeviant Behavior

mother	-.472**
father	-.307
parents	-.437*
siblings	-.602**

I. Neutral Consequences to Deviant Behavior

mother	-.245
father	-.180
parents	-.265
siblings	-.156

* $p < .05$
** $p < .01$

Table 6

Correlations of Consequence Classes Across Behavior Classes

A. Positive Consequences to Deviant Behavior to Positive Consequences to Nondeviant Behavior

mother	.383**
father	.427**
parents	.305*
siblings	.342*

B. Negative Consequences to Deviant Behavior to Negative Consequences to Nondeviant Behavior

mother	.410**
father	.368**
parents	.596***
siblings	.254

C. Neutral Consequences to Deviant Behavior to Neutral Consequences to Nondeviant Behavior

mother	.335*
father	.365**
parents	.343*
siblings	.252

* $p < .10$ (nonsignificant, two-tailed)
** $p < .05$
*** $p < .01$